

- Suleiman, S., Hourmant, A., Penot, M.: Influence of abscisic acid on K^+ absorption by leaf discs of *Solanum tuberosum*. – Biol. Plant. 33 : 49–57, 1991 b.
- Van Steveninck, R. F. M.: The “Washing” or “Aging” phenomenon in plant tissues. – Annu. Rev. Plant Physiol. 26 : 237–258, 1975.
- Van Steveninck, R. F. M., Van Steveninck, M. E.: Absciscic acid and membrane transport. – In: Addicott, F. T. (ed.): Absciscic Acid. Pp. 171–235. Praeger Pub., New York 1983.

Levenson, M. D., Kano, S. S.: Introduction to Nonlinear Laser Spectroscopy. – Academic Press, Inc., Harcourt Brace Jovanovich, Publ., Boston-San Diego–New York–Berkeley–London–Sydney–Tokyo–Toronto 1988. 300 pp. US \$ 39.50.

This book, edited within the series of monographs “Quantum Electronics – Principles and Applications” (ed. by P. L. Liao and P. Kelley), is a new revised and extended edition of the equally titled publication from 1982. The book appears at the time when the field of nonlinear laser spectroscopy has sufficiently matured and thus a danger of rapid obsolescence of this book is small. The book offers comprehensive overview of recently developed methods and techniques of nonlinear laser spectroscopy. It belongs to those publications that facilitate the understanding of both the general theoretical principles and practical applications. Theoretical explanation of nonlinear events continues by the description of measuring methods, possible application and examples of measurement. The presentation of the nonlinear Spectroscopy techniques is unified at a level accessible to graduate students and spectroscopists unfamiliar with nonlinear optics. However, some familiarity with laser physics and quantum mechanics are necessary before reading this book.

The book reviewed consists of seven chapters. The first chapter shortly explains principles of tunable lasers and summarizes nonlinear phenomena. The second chapter gives a general theoretical basement for following more special explanations. Chapter 3 describes experimental methods of saturation spectroscopy in gases and condensed phase and explains principles of modulation transfer, dynamic grating and multiphoton and double resonance saturation techniques. Chapter 4 deals with coherent Raman spectroscopy, the powerful method for the characterization of structure and dynamic features of molecules. It describes techniques of measurement of Raman spectra in Stokes and anti-Stokes regions and principles of the Raman-induced Kerr effect spectroscopy, stimulated Raman gain and loss spectroscopy and wave mixing techniques. The next two chapters are concerned with multiphoton absorption and ionization techniques and optical coherent transients. The last chapter dealing with nonlinear sources describes the principles of n -order sum and harmonic generation, XUV sources, Raman shifting and infrared sources.

The book is well edited and printed on good paper. The text is accompanied by many figures or schemes (118) and tables (8). The clear explanation of the thema, included problem sets with expected answers and abundant references make this book suitable to be the starting literature for anyone who intends to study the field of nonlinear spectroscopy. It will also be a valuable source of recently developed methods and techniques to researchers working in the area of photosynthesis, particularly in primary photochemistry or plant biochemistry.